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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/559,650	10/30/2006	Joachim Stumpe	31583-226294 RK	7348
26694	7590	01/22/2009	EXAMINER	
VENABLE LLP			LAUCHMAN, LAYLA G	
P.O. BOX 34385				
WASHINGTON, DC 20043-9998				
			ART UNIT	PAPER NUMBER
			2877	
			MAIL DATE	DELIVERY MODE
			01/22/2009	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/559,650	<b>Applicant(s)</b> STUMPE ET AL.	
	<b>Examiner</b> L. G. Lauchman	<b>Art Unit</b> 2877	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 December 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☒ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>12/05/05</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on June 5, 2003. It is noted, however, that applicant has not filed a certified copy of the German application as required by 35 U.S.C. 119(b).

### ***Information Disclosure Statement***

The information disclosure statement filed 12/05/05 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 10-13 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claims 10 and 12, the phrase "can be" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-3, 8 are rejected under 35 U.S.C. 102(b) as being anticipated by Bortchagovsky et al (*Comparison of ellipsometric methods for separate determination of thickness and optical constants of thin films*, June 2005, Conference Title: Lightmetry: Metrology, Spectroscopy, and Testing Techniques Using Light, Poland).

Bortchagovsky et al teach a method for determining the refractive index of transparent or partially transparent layers, wherein the layer is irradiated with polarized light at different angles of incidence (see abstract and chapter 2.1 Multiple angle of incidence methods), and wherein variations in the polarization of the light are measured and evaluated as the light passes through the layer, characterized in that the measurement is carried out through an immersion medium which has a higher refractive index than air (chapters 3.2 and chapter 4.1), and between which the layer is inserted. The layer is applied to a transparent substrate and is measured on the substrate, and an immersion medium is used with a refractive index which is at least corresponds approximately to a refractive index of the substrate, and the layer is irradiated simultaneously or consecutively with light of different wavelengths in order to determine the complex refractive index.

Claims 10-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Nakatani et al (US 3,963,348).

The patent teaches (Fig.1 )a transmission measuring device for measuring a variation in polarization as the polarized light passes through a sample and a rotating device for the sample 1, characterized in that the device comprises an immersion medium which has a higher refractive index than air, and a support for the immersion medium is provided and is designed so that the sample can be inserted between the immersion medium and can be rotated in or with the immersion medium relative to a beam axis of the polarized light (col. 2, lines 41-54, col. 3, lines 48-66, col. 3, lines 48-66, col. 4, lines 43-61). The support is a chamber for a liquid immersion medium, which has inlet and outlet surfaces for the polarized light. The chamber is designed in a cylindrical shape and is connected to the rotating device so that it can be rotated by means of the rotating device.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bortchagovsky et al (*Comparison of ellipsometric methods for separate determination of thickness and optical constants of thin films*, June 2005, Conference Title: Lightmetry: Metrology, Spectroscopy, and

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Testing Techniques Using Light, Poland), as applied to claim 1. Bortchagovsky et al does not specifically disclose placing the layer being measured in a chamber with liquid. However, it would be obvious to one of ordinary skill in the art at the time the invention was conceived to use the chamber in order to hold a liquid medium.

Claims 5-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Bortchagovsky et al (*Comparison of ellipsometric methods for separate determination of thickness and optical constants of thin films*, June 2005, Conference Title: Lightmetry: Metrology, Spectroscopy, and Testing Techniques Using Light, Poland), as applied to claim 1, in view of admitted prior art T. Srihirin et al., ChemPhysChem, 2002, pages 335 - 342. Srihirin et al the thin layer is applied to a glass substrate and measured with the glass substrate between two hemispheres of a material with a suitable refractive index. It would be obvious to one of ordinary skill in the art at the time the invention was conceived to have an immersion medium by two solid bodies in order to reduce angle-dependent reflection losses on the interfaces. As for the measuring layers for flat screens, optical data storage or optical wave guides, It would be obvious to one of ordinary skill in the art at the time the invention was conceived to select a type of measuring layers, since substitution of one known element for another and the results of substitution would have been predictable.

### **Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to L. G. Lauchman whose telephone number is (571) 272-2418.

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The examiner's normal work schedule is 8:00am to 4:30pm (EST), Monday through Friday. If attempts to reach examiner by the telephone are unsuccessful, the examiner's supervisor Gregory J. Toatley, Jr. can be reached on (571) 272-2059, ext. 77.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Any inquiry of a general nature or relating to the status of this application should be directed to the TC receptionist whose telephone number is (571) 272-1562.

/L. G. Lauchman/  
Primary Examiner, Art Unit 2877

1/22/2009